

### **REMARKS**

Claims 13-15 and 17-32 are currently pending in the present application. Claim 13 has been amended, which is supported by the present specification, at least, at page 6, lines 9-11. Claims 14, 15, 17, 18 and 21-32 have been amended by making minor editorial changes. No new matter has been added by way of the present claim amendments.

#### ***Claim Objections***

Claim 17 has been objected to a being in improper dependent form. In the present response claim 17 has been amended to depend upon claim 13. Accordingly, Applicants respectfully request withdrawal of the outstanding claim objection.

#### ***Rejections under 35 U.S.C. §103***

Claims 13, 17-26, and 29-32 stand rejected under 35 U.S.C. §103(a) as obvious over USP 6,120,556 to Nishino et al. (hereinafter "Nishino").

Claims 14, 15 and 17 stand rejected under 35 U.S.C. §103(a) as being rendered obvious by Nishino in view of USP 4,238,282 to Hyde (hereinafter "Hyde").

Claims 27 and 28 stand rejected under 35 U.S.C. §103(a) as being rendered obvious by Nishino in view of USP 6,444,771 to Yamaguchi et al. (hereinafter "Yamaguchi").

Claim 13 has been amended to recite the following:

A process for bleaching a cellulosic fibre material with a peroxide compound in an aqueous alkaline medium, comprising a bleaching step wherein

a) a polymer solution consisting of a first polymer (A) comprising a homopolymer of acrylic acid, methacrylic acid or maleic acid, or a copolymer of acrylic acid and/or methacrylic acid with an unsaturated dicarboxylic acid, and a second polymer (B) comprising a poly- $\alpha$ -hydroxyacrylic acid or a salt thereof, said polymer solution having a pH of at most 6, is added to a cellulosic fibre material, and

b) thereafter adding a peroxide compound and an alkaline substance and carrying out the bleaching;

wherein step (b) is carried out essentially immediately after the addition of the polymer solution to the cellulosic fibre material, without a washing step between steps (a) and (b).

The present claim amendments highlight the distinctions between the present invention and Nishino. Specifically, claim 13 has been amended to clearly recite that steps (a) and (b) are carried out in the same bleaching step, and that step (b) is carried out essentially immediately after the addition of the polymer solution to the cellulosic fibre material (without a washing step between steps (a) and (b)). As previously explained, Nishino discloses methods for bleaching a fibre material comprising either:

1) pretreating the fibre material with an aqueous solution of the stabilizing agent, and then bleaching the pretreated fiber material with an aqueous solution of a bleaching agent (col. 3, line 66 – col. 4, line 23), or

2) bleaching the fibre material with an aqueous bleaching solution comprising a bleaching agent and said stabilizing agent (col. 4, lines 29-53).

Both of the above-disclosed processes of Nishino are different from the presently claimed invention.

Applicants respectfully submit that “a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Thus, if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

It should be emphasized that when the two polymers of Nishino are combined (i.e. an alkaline pH value, the most preferred pH being from 8 to 10 – page 6, line 16), a precipitation will occur sooner or later.

The present invention solves this problem by providing an acidic aqueous polymer solution of the two polymers (A) and (B), the pH of the polymer solution being at most 6, preferably at most 5. Nishino does not disclose nor suggest solving the precipitation problem by providing an acidic aqueous stabilizing solution.

The stabilizing effect of the polymer solution used in the peroxide bleaching process of the present invention is demonstrated by means of the examples included in the description (pages 3-4). With respect to Example 3 of the present specification, Applicants respectfully submit that the actual pH of the solution was 4.7 giving a stable solution. Then, the pH was raised to 6.4 giving a solution which was at first turbid, but then turned clear. Thus, the result obtained at pH 6.4 is not satisfactory for the present invention.

The Examiner has taken the position that "a person of ordinary skill in the art could additionally reasonably expect a pH decrease of 1 or 1.5 from the pH of 6 of Nishino to be successful as they are all acidic pHs." Further, the Examiner has taken the position that it would have been obvious to optimize the pH of the solution and refers to col. 7, lines 45-52 of Nishino to support his position. However, Applicants respectfully submit that even if one of ordinary skill would be led to optimize the pH, the Nishino disclosure only encourages the upward modification of pH (i.e. making the solution more basic), as opposed to modifying the pH below 6. Thus, for at least this reason, Nishino teaches away from the presently claimed invention.

With regard to the phosphonate chelant, EDTMP, Applicants have previously argued that the EDTMP of Nishino did not produce satisfactory results. Nevertheless, the Examiner has maintained that substituting the chelants for those disclosed by Hyde would have been obvious to the skilled artisan. Applicants respectfully traverse because if Nishino discloses that phosphonate chelants yield unsatisfactory results, it would appear to dissuade the skilled artisan from selecting another phosphonate chelant as disclosed in Hyde. Thus, for at least this reason, Nishino teaches away from the presently claimed invention.

Finally, the Examiner has taken the position that Nishino does not state that the nitrogen-containing chelant is critical. *See* Office Action, page 6, the first full paragraph. Applicants respectfully disagree. Applicants respectfully submit that a fair reading of Nishino reveals that nitrogen-containing chelants are an absolutely essential feature of the invention. *See* Nishino, Table 1. Thus, for at least this reason, Nishino teaches away from the presently claimed invention.

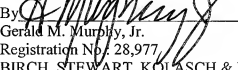
In view of the foregoing, Applicants believe the pending application is in condition for allowance. A Notice of Allowance is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Monique T. Cole, Reg. No. 60,154, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By   
MTC Gerald M. Murphy, Jr.  
Registration No. 28,977  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant